NGAC Cultural & Historical Geospatial Resources Subcommittee Report



Protecting Federal Cultural and Historical Geospatial Resources: A Review and Recommendations

The National Geospatial Advisory Committee (NGAC) Subcommittee on Cultural and Historical Geospatial Resources conducted a research study in 2017- 2018. The objective of this research was to understand the issues and challenges associated with the protection, preservation and use of cultural and historical geospatial datasets and other derived geospatial information that is created, maintained, and/or managed by Federal agencies.



Committee Membership

- Garet Couch, Chair
- Byron Bluehorse
- Gar Clarke
- Frank Harjo
- Laxmi Ramasubramanian
- Mark Reichardt
- Jennie Stapp
- Julie Sweetkind-Singer
- Federal Liaison: Deidre McCarthy
- FGDC Liaison: John Mahoney



Our Approach

Subcommittee members conducted individual interviews with eleven Federal geospatial officers or those individuals responsible for managing and regulating access to culturally and historically significant geospatial data assets. The data collection effort took place between March and August 2018, targeting agencies with significant land holdings or land stewardship.

Each interview addressed three broad themes: data use policies, denial of data use requests, and views regarding the management of historically and culturally sensitive datasets in the Federal government. This resulted in the following findings.



Findings

- Finding 1: From the interviews, it is clear that there is a lack of consistency in defining and identifying geospatial data assets associated with sensitive culturally and historically significant resources across Federal agencies.
- Finding 2: The use of geospatial data associated with historic and culturally significant resources is highly regulated. However, the regulatory procedures are highly variable across agencies and states.
- Finding 3: Decisions to provide or deny access to the data is often made by individuals not well-versed in the geospatial sciences (GIS, database management, remote sensing, qualitative data analysis and so on)
- Finding 4: Data created by individuals or contractors to manage field operations may be proprietary and not easily subject to regulation or oversight



Panel Discussion On Interview Findings

- Garet Couch
- Gar Clarke
- Jennie Stapp



Recommendations

The Department of the Interior, National Park Service (NPS) serves as the Lead Covered Agency for the Cultural Resources National Geospatial Data Asset (NGDA) data theme. The NPS also provides leadership for the interagency FGDC Cultural Resources Subcommittee. Under the terms of the Geospatial Data Act, DOI/NPS has multiple responsibilities for the development, coordination, and implementation of the Cultural Resources data theme. These responsibilities include providing leadership across the agencies involved in the data theme and facilitating the development and implementation of a plan for nationwide population of the theme. In developing this plan and in carrying out the other responsibilities outlined in the GDA, the NGAC recommends that the FGDC agencies address the following recommendations:



Recommendation 1:

Definitions of cultural resource spatial data

The National Register of Historic Places defines cultural resource data, as it is classified in the National Historic Preservation Act. Over many years however, the definition of what constitutes "cultural resource" data has expanded to include ethnographic resources, cultural landscapes, and other resource types. The NGAC recommends that the FGDC Cultural Resources Subcommittee work to identify the various definitions of cultural resource spatial data as characterized in existing cultural resource laws and regulations to find commonality. The NGAC also recommends that the Cultural Resources Subcommittee develop a working list of resources and features that would qualify as both restricted and unrestricted "cultural resource spatial data," to help the general public as well as the cultural resource community and Federal/Tribal/State/local governments understand which specific entities the cultural resource standards would apply to and how to share that data appropriately using the guidance developed.



Recommendation 2:

Guidelines on the management, access control, and exchange of geospatial data associated with sensitive cultural and historical resources

The NGAC recommends that the FGDC Cultural Resources Subcommittee develop guidelines on the management, access control, and release of cultural and historical geospatial datasets and other derived cultural and historical geospatial information. These guidelines should address considerations such as:

- Are adequate internal procedures and safeguards in place to properly categorize, manage, and secure datasets?
- Will the release of this geospatial data lead to risks of damage to a cultural or historic site that outweigh the intended benefit of the release?
- Have potentially impacted entities such as Tribal and State governments been consulted about this potential data release as required in Executive Order 13175, and the Geospatial Data Act Sec. 759(a)(7)?



Recommendation 3:

Data sharing agreements and strategies

The NGAC recommends that the FGDC Cultural Resources Subcommittee develop guidelines on implementation of data sharing agreements that address the release of geospatial data associated with sensitive cultural and historical resources. Possible components of a data sharing agreement may include:

- Detailed descriptions of projects for which data is being released;
- Provisions that data may not be shared with other entities without written consent;
- Expiration dates defining when data should be returned or destroyed; and
- Implementation of a system of accountability to ensure exchanged data is safeguarded.

The FGDC Cultural Resource Agencies should compile existing strategies for sharing sensitive and non-sensitive cultural resource data and develop guidance that can be used by all Federal/Tribal/State/local agencies to facilitate data exchange.

Possible information to include may be:

- Definitions of the various levels of sensitivity for cultural resource data;
- Guidelines as to when distribution of sensitive data is appropriate;
- Information as to how to determine the level of detail (both spatial and descriptive) to be shared; and
- Best practices for executing confidentially agreements with participating parties.



Recommendation 4:

Continue development of current spatial data transfer standards

The FGDC Cultural Resource Subcommittee has been working since 2002 to develop appropriate spatial data standards for cultural resources. Based on research and previous attempts by other Federal/State agencies, the creation of cultural resource spatial data content standards would be impractical and costly due to the differences in data elements created, collected, and maintained by Federal/Tribal/State/local governments meeting their regulatory requirements for the National Historic Preservation Act (Sec. 110).

The FGDC Cultural Resource Subcommittee determined that a spatial data transfer standard to facilitate the sharing of cultural resource spatial data among agencies would be more practical and helpful to the cultural resource community as a whole, and for meeting regulatory responses. The subcommittee is near completion of these standards, with a data model and guidance document now in final draft form. The NGAC recommends that the subcommittee complete this task to create the spatial data transfer standards by the end of calendar year 2020.



Recommendation 5:

Develop a training strategy and materials

The NGAC recommends that the FGDC agencies develop and implement training on the management of geospatial data associated with sensitive cultural and historical resources.

The training should cover topics including:

- Definitions of cultural resource spatial data;
- Guidelines on the management, access control, and exchange of geospatial data;
- Examples of data sharing agreements, including:
- Tracking agreements and lifecycle tracking;
- Non-disclosure agreements;
- Consultation protocols with stakeholders;
- Examples of conducting proper consultation prior to any data release with potentially impacted entities such as Tribes and States;

Federal Geographic Data Commit

Information about spatial data transfer standards.

DOI/NPS, and the other agencies involved in the FGDC Cultural Resources Subcommittee, should consider including this training component in the NGDA theme plan required under the GDA.

Conclusion

We recommend that the NGAC continue to do work on this topic. This subcommittee has identified significant inconsistencies regarding the definition, management, access, and use of cultural and historical geospatial information. The issues identified require attention in order for the historic and cultural assets to be adequately managed and protected. Given the complexities (e.g. range of jurisdictions, public and private sector, individuals and organizations) presented by these inconsistencies and the implications associated with misuse of this information, we expect only incremental improvements in policy and community implementation in the near-term should the subcommittee's recommendations be adopted.

We therefore recommend that this subcommittee remain in place to periodically monitor and measure progress, and to identify additional recommendations as necessary to further comply with established law, and to assure proper management, protection, and use of geospatial information related to cultural and historical resources.

